

METHODS AND APPARATUS FOR PROVIDING SIGNAL DEPENDENT OFFSET AND GAIN ADJUSTMENTS FOR A SOLID STATE X-RAY DETECTOR

Abstract of Disclosure

Methods and apparatus are provided in a diagnostic X-ray system for reducing signal conversion time for a solid-state detector panel of the X-ray system in order to increase frame rate. A measurement of a set of induced signal offsets caused by time varying charge retention associated with the detector panel is performed during a phantom time segment prior to normal signal readout of the detector panel for a current image frame. A set of adjustment values is generated in response to the set of induced signal offsets. Subsets of signal values of the detector panel are read out to a pre-determined signal dynamic range as part of normal signal readout of the detector panel in response to the set of adjustment values, thus generating a set of normalized detector signals.

Figures